

EXHIBIT 1

One-Piece Cast-In Heater Provides Efficiently and Cost Savings

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One-Piece Cast-In Heater Provides Efficiently and Cost Savings

Case History # 16a Cast-In Heaters
SIC 3089 - Plastics Processing/Extruding

Problem:

A major plastic extruder company used a set of six band heaters to heat each extrusion barrel, allowing gaps between the heaters for cooling. This proved cumbersome and produced maintenance problems when a heater would fall from contamination.

Solution:

Watlow developed and patented a cast-in heater design that was simpler, more cost effective and more efficient. Instead of making six separate heaters for each barrel, one semi-cylindrical cast-in heater with five open sections, or "windows," was created. This one-piece heater provided greater heat transfer than the other units because the entire contact surface conducted heat from the resistance element to the load. The cast-in design made it virtually impervious to contamination from plastic drool.

In addition to these benefits, assembly time has been greatly reduced. The cast-in window heaters have fewer lead wires than band heaters, so only two sets of connections are needed instead of six.

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